

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1-96. (Cancelled).

97. (Currently Amended) An isolated antibody that immunospecifically binds B Lymphocyte Stimulator protein ~~which~~ wherein said antibody comprises a first amino acid sequence at least 85% identical to amino acid residues 1-123 of SEQ ID NO:327 and a second amino acid sequence at least 85% identical to amino acid residues 141-249 of SEQ ID NO:327 and wherein said B Lymphocyte Stimulator protein is selected from the group consisting of:

- (a) a protein whose amino acid sequence consists of amino acid residues 1-285 of SEQ ID NO:3228;
- (b) a protein whose amino acid sequence consists of amino acid residues 134-285 of SEQ ID NO:3228; and
- (c) a trimer of the protein of (b).

98. (Previously Presented) The antibody of claim 97 wherein the first amino acid sequence is at least 95% identical to amino acid residues 1-123 of SEQ ID NO:327 and the second amino acid sequence is at least 95% identical to amino acid residues 141-249 of SEQ ID NO:327.

99. (Previously Presented) The antibody of claim 97 wherein the amino acid differences between the first amino acid sequence and amino acid residues 1-123 of SEQ ID NO:327 are in one or more of the CDR regions located at amino acid residues 26-35, 50-66 and 99-112 of SEQ ID NO: 327 and wherein the amino acid differences between the second amino acid sequence and amino acid residues 141-249 of SEQ ID NO: 327 are in one or more of the CDR regions located at amino acid residues 163-173, 189-195 and 228-238 of SEQ ID NO: 327.

100. (Currently Amended) An isolated antibody that immunospecifically binds B Lymphocyte Stimulator protein ~~which~~ wherein said antibody comprises amino acid residues 1-123 of SEQ ID NO: 327 and amino acid residues 141-249 of SEQ ID NO: 327 and wherein said B Lymphocyte Stimulator protein is selected from the group consisting of:

- (a) a protein whose amino acid sequence consists of amino acid residues 1-285 of SEQ ID NO:3228;
- (b) a protein whose amino acid sequence consists of amino acid residues 134-285 of SEQ ID NO:3228; and
- (c) a trimer of the protein of (b).

101-118. (Cancelled).

119. (Previously Presented) The antibody of claim 97 wherein the antibody is selected from the group consisting of:

- (a) a whole immunoglobulin molecule;
- (b) an scFv;
- (c) a chimeric antibody;
- (d) a Fab fragment;
- (e) an Fab' fragment; and
- (f) an F(ab')₂.

120. (Previously Presented) The antibody of claim 97 wherein the antibody is a monoclonal antibody.

121. (Previously Presented) The antibody of claim 97 wherein the antibody is a human antibody.

122. (Previously Presented) The antibody of claim 97 which comprises a heavy chain immunoglobulin constant domain selected from the group consisting of:

- (a) a human IgM constant domain;
- (b) a human IgG1 constant domain;
- (c) a human IgG2 constant domain;

- (d) a human IgG3 constant domain;
- (e) a human IgG4 constant domain; and
- (f) a human IgA constant domain.

123. (Previously Presented) The antibody of claim 97 which comprises a light chain immunoglobulin constant domain selected from the group consisting of:

- (a) a human kappa constant domain; and
- (b) a human lambda constant domain.

124. (Previously Presented) The antibody of claim 97 wherein the antibody has a dissociation constant (K_D) less than or equal to 10^{-9} M.

125. (Previously Presented) The antibody of claim 97 wherein the antibody is coupled to a detectable label.

126. (Previously Presented) The antibody of claim 125 wherein the detectable label is a radioisotope, an enzyme, a fluorescent label, a luminescent label, bioluminescent label or biotin.

127. (Previously Presented) The antibody of claim 126 wherein the radioisotope is ^{125}I , ^{131}I , ^{111}In , ^{90}Y , $^{99\text{m}}\text{Tc}$, ^{177}Lu , ^{166}Ho , or ^{153}Sm .

128-129. (Cancelled).

130. (Previously Presented) The antibody of claim 97 wherein the antibody neutralizes said protein.

131. (Previously Presented) The antibody of claim 130 wherein the antibody diminishes the ability of said protein to bind to a receptor of said protein.

132. (Previously Presented) The antibody of claim 131 wherein the receptor is TACI.

133. (Previously Presented) The antibody of claim 131 wherein the receptor is BCMA.
134. (Previously Presented) The antibody of claim 130 wherein the antibody diminishes the ability of said protein to stimulate B cell proliferation.
135. (Previously Presented) The antibody of claim 130 wherein the antibody diminishes the ability of said protein to stimulate immunoglobulin secretion by B cells.
136. (Previously Presented) The antibody of claim 100 wherein the antibody is selected from the group consisting of:
- (a) a whole immunoglobulin molecule;
 - (b) an scFv;
 - (c) a chimeric antibody;
 - (d) a Fab fragment;
 - (e) an Fab' fragment; and
 - (f) an F(ab')₂.
137. (Previously Presented) The antibody of claim 100 wherein the antibody is a monoclonal antibody.
138. (Previously Presented) The antibody of claim 100 wherein the antibody is a human antibody.
139. (Previously Presented) The antibody of claim 100 which comprises a heavy chain immunoglobulin constant domain selected from the group consisting of:
- (a) a human IgM constant domain;
 - (b) a human IgG1 constant domain;
 - (c) a human IgG2 constant domain;
 - (d) a human IgG3 constant domain;
 - (e) a human IgG4 constant domain; and
 - (f) a human IgA constant domain.

140. (Previously Presented) The antibody of claim 100 which comprises a light chain immunoglobulin constant domain selected from the group consisting of:

- (a) a human kappa constant domain; and
- (b) a human lambda constant domain.

141. (Previously Presented) The antibody of claim 100 wherein the antibody is coupled to a detectable label.

142. (Previously Presented) The antibody of claim 141 wherein the detectable label is a radioisotope, an enzyme, a fluorescent label, a luminescent label, bioluminescent label or biotin.

143. (Previously Presented) The antibody of claim 142 wherein the radioisotope is ^{125}I , ^{131}I , ^{111}In , ^{90}Y , $^{99\text{m}}\text{Tc}$, ^{177}Lu , ^{166}Ho , or ^{153}Sm .

144. (Previously Presented) An antibody purified from the cell line contained in American Type Culture Collection Deposit Number PTA-3239.

145. (Previously Presented) An antibody purified from the cell line contained in American Type Culture Collection Deposit Number PTA-3240.

146. (Previously Presented) The antibody of claim 100 which comprises a human IgG1 heavy chain immunoglobulin constant domain and a human lambda light chain immunoglobulin constant domain.

147. (Previously Presented) The antibody of claim 100 wherein the antibody neutralizes said protein.

148. (Previously Presented) The antibody of claim 147 wherein the antibody diminishes the ability of said protein to bind to a receptor of said protein.

149. (Previously Presented) The antibody of claim 148 wherein the receptor is TACI.

150. (Previously Presented) The antibody of claim 148 wherein the receptor is BCMA.

151. (Previously Presented) The antibody of claim 147 wherein the antibody diminishes the ability of said protein to stimulate B cell proliferation.

152. (Previously Presented) The antibody of claim 147 wherein the antibody diminishes the ability of said protein to stimulate immunoglobulin secretion by B cells.

153. (New) An isolated antibody that immunospecifically binds B Lymphocyte Stimulator protein wherein said antibody comprises amino acid residues 1-123 of SEQ ID NO:2 and amino acid residues 141-249 of SEQ ID NO:2 and wherein said B Lymphocyte Stimulator protein is selected from the group consisting of:

- (a) a protein whose amino acid sequence consists of amino acid residues 1-285 of SEQ ID NO:3228;
- (b) a protein whose amino acid sequence consists of amino acid residues 134-285 of SEQ ID NO:3228; and
- (c) a trimer of the protein of (b).